DISCUSSION OF THE CLAIMS

Support for amended Claim 9 is found at specification page 3, lines 12-19 and page 5, lines 1-6 and in original Claims 10 and 14. Claims 11, 12, 15 and 18 have been amended to remove informalities. Claims 10 and 14 have been canceled. No new matter has been added.

REMARKS/ARGUMENTS

An embodiment of the presently-claimed invention relates to "[A] method for producing a metal glass body, comprising solidifying a molten metal while applying electromagnetic vibrating force to the molten metal, and thereby producing a single-phase metal glass or a metal glass body having a metal glass texture structure of fine crystals uniformly dispersed throughout a glass phase, wherein a direct current magnetic field and an alternating current electrical field are simultaneously applied for applying electromagnetic vibration on the molten metal to produce the metal glass body" as in amended Claim 9 (See, amended Claim 1, emphasis added).

The rejection of Claims 9, 14, 15, 17 and 18 under 35 U.S.C. 102(b) as being anticipated by Horimura Hiroyuki (JP 04-854837, JP'837, with machine translation).

JP'837 discloses a manufacturing method of an amorphous alloy. However, JP'837 does not disclose or suggest all the limitations as in amended Claim 9. Particularly, JP'837 fails to disclose applying electromagnetic vibrating force to a molten metal as in amended Claim 9.

In detail, JP'837 discloses supercooling an amorphous alloy composition at a temperature between a crystallization temperature T_x and a vitrification temperature T_g where $T_x > T_g$ (see, JP'837, paragraph [0006], and drawing 3). JP'837 further discloses applying vibration to the material in the supercooled-liquid state at a temperature between the crystallization temperature T_x and the vitrification temperature T_g (See, JP'837, paragraph [0007]). Thus, JP'837 discloses applying vibration at a temperature below the crystallization temperature T_x which is below the melting point of material . However, JP'837 fails to disclose or suggest applying electromagnetic vibrating force to a molten metal as in amended Claim 9.

On the contrary, Applicants disclose applying electromagnetic vibrating force to a molten metal as in amended Claim 9. In an inventive example, Applicants show melting $Mg_{65}Y_{10}Cu_{25}$ at 550°C and applying an electromagnetic vibration at the molten $Mg_{65}Y_{10}Cu_{25}$ at 550°C (See, specification, page 15, lines 3-15, Example 1) whereas JP'837 vibrates the $Mg_{65}Y_{10}Cu_{25}$ at a temperature below the crystallization temperature T_x of 201°C to hold it in a flow state (See, JP'837, paragraphs [0011]-[0012]). Thus, JP'837 simply fails to disclose or suggest applying electromagnetic vibrating force to a molten metal as in amended Claim 9.

Furthermore, in JP'837, there is no disclosure or suggestion that a direct current magnetic field and an alternating current electrical field are simultaneously applied for applying electromagnetic vibration on the molten metal to produce the metal glass body as in amended Claim 9.

Therefore, JP'837 cannot render anticipated or obvious amended Claim 9 and the dependent claims therefrom.

Withdrawal of the rejection is respectfully requested.

The rejection of Claims 10-13 and 16 under 35 U.S.C. 103(a) as being unpatentable over JP'837 in view of Ikeda et al (US Pat. 6,919,003, US'003) is traversed.

The secondary reference to US'003 does not cure the deficiencies of JP'837.

US'003 discloses a process including stirring a dispersion of containing charged phoretic particles to deposit the charged phoretic particles on electrodes. However, US'003 does not disclose or suggest 1) applying electromagnetic vibrating force to a molten metal and particularly 2) applying a direct current magnetic field and an alternating current electrical field simultaneously on the molten metal to produce a metal glass body as in amended Claim 9.

Therefore, JP'837 in combination with US'003 cannot render obvious amended Claim 9 and the dependent claims therefrom.

Withdrawal of the rejection is respectfully requested.

The rejection of Claims 11, 12, and 18 under 35 U.S.C. 112, second paragraph is believed to be obviated by the present amendment.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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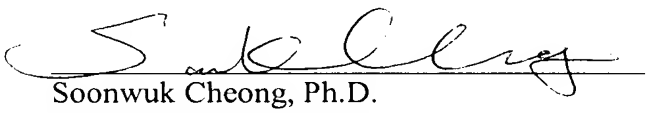
Norman F. Oblon



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